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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,323

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Tomoyoshi Mitsumoto

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

LEE, SIN J

ART UNIT

PAPER NUMBER

1752

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/809,323	Applicant(s) MITSUMOTO ET AL.	
	Examiner Sin J. Lee	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13,15 and 17 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,8-11 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 6,7,12,14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

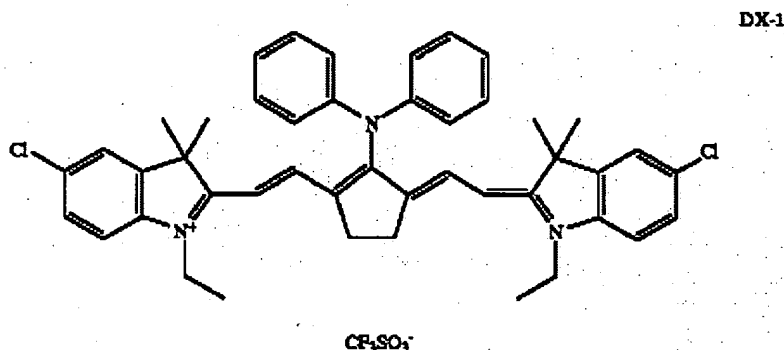
3. Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18 and 19 both depend from present claim 1 (which lists component (A), (B) and (C)) ultimately. Yet, both of those claims *recite* an infrared absorber (A), a radical generator (B) and a radical-polymerizable compound (C) *again* as if they were separate, additional components than those listed in present claim 1.

Appropriate correction is required.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimada et al (US 2003/0054288 A1).

In Example 25, Shimada teaches (see [0283]-[0287]) a planographic printing plate precursor, which comprises a substrate and a photosensitive layer, and the composition for the photosensitive layer contains a polymerization initiator (present component (B)), an addition-polymerizable compound (present component (C)), and a light-heat converting agent DX-1 of the following structure:



Shimada's compound DX-1 is also shown in present specification (pg.27) as one of preferred examples for the present compound (A). Therefore, the prior art teaches present inventions of claims 1 and 2: Shimada states in [0210] that his printing plate precursor **can be developed with water** or an alkaline aqueous solution. Therefore, it

is the Examiner's position that Shimada's photosensitive layer is *capable* of being removed with dampening water as presently recited.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 4, 5, 8, 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al (US 2003/0054288 A1) in view of Kawamura (US 6,599,674 B1).

Shimada is discussed above in Paragraph 3. Shimada does not teach present undercoat layer containing a compound having a polymerizable group on the molecule. Kawamura, which teaches a heat-sensitive lithographic printing plate, teaches the use of an organic undercoat layer containing a compound, which is obtained by the hydrolysis and polycondensation reaction of a silane coupling agent having at least one addition polymerizable functional group, in order to improve the adhesion of an image-forming layer to the support (see col.24, lines 13-67, col.25, lines 1-67). As one of examples for the silane coupling agent, Kawamura discloses $\text{CH}_2=\text{CH}-\text{Si}(\text{OC}_2\text{H}_5)_3$. Based on Kawamura's teaching, it would have been obvious to one skilled in the art to use an organic undercoat layer containing the compound obtained by the hydrolysis and polycondensation reaction of the silane coupling agent, $\text{CH}_2=\text{CH}-\text{Si}(\text{OC}_2\text{H}_5)_3$, in Shimada's invention in order to improve the adhesion of Shimada's photosensitive layer and substrate. Therefore, Shimada in view of Kawamura render obvious present inventions of claims 4, 5, 8, 9 and 20.

8. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al (US 2003/0054288 A1) in view of Crutchfield et al (4,365,018).

Shimada is discussed above in Paragraph 3. Shimada does not teach present encapsulation of claims 10 and 11. However, it is well known in the art to physically separate reactants of a light sensitive imaging layer by encapsulating one of more of the reactants so as to prevent any chemical reactions among those reactants prior to an imaging step, as evidenced by Crutchfield, col.2, lines 24-44. Therefore, it would have been obvious to one skilled in the art to physically separate (by encapsulating) the components of Shimada's photosensitive layer in order to prevent the photopolymerization reaction among those components prior to the imaging step. Therefore, Shimada in view of Crutchfield render obvious present inventions of claims 10 and 11.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al (US 2003/0054288 A1) in view of Kawamura (US 6,599,674 B1) as applied to claim 9 above, and further in view of Crutchfield et al (4,365,018).

Shimada in view of Kawamura is discussed above in Paragraph 5. Shimada in view of Kawamura does not teach present encapsulation of claim 19. However, it is well known in the art to physically separate reactants of a light sensitive imaging layer by encapsulating one of more of the reactants so as to prevent any chemical reactions among those reactants prior to an imaging step, as evidenced by Crutchfield, col.2, lines 24-44. Therefore, it would have been obvious to one skilled in the art to physically separate (by encapsulating) the components of Shimada's photosensitive layer in order

to prevent the photopolymerization reaction among those components prior to the imaging step. Therefore, Shimada in view of Kawamura and further in view of Crutchfield render obvious present invention of claim 19.

Allowable Subject Matter

10. Claims 6, 7, 12, 14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Shimada does not teach or suggest present step of claim 12 for supplying both an aqueous component and an oil-based ink to the exposed plate. Shimada in view of Kawamura does not teach or suggest present compound of claims 6 and 7 having a polymerizable group on the molecule also having on the molecule an ethylene oxide group.

11. Claims 13, 15 and 17 are allowed. Shimada does not teach or suggest present step of claim 13 for supplying both an aqueous component and an oil-based ink to the exposed plate.

Response to Arguments

12. Applicants argue that in Shimada, it is a prerequisite to perform the wet development step using an alkaline developer, with the on-machine development with printing ink and /or dampening water being impossible. However, there is *no evidence on the record* showing (or proving) that Shimada's recording layer is *not removable* with printing ink or dampening water. In fact, Shimada *clearly states* in [0210] that his printing plate precursor *is preferably developed with water or an alkaline aqueous solution*. Therefore, it is the Examiner's position that Shimada's photosensitive layer is

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capable of being removed with dampening water as presently recited (present claim 1 is not a method claim, which states a positive step of performing the on-machine development with printing ink and/or dampening water) Applicants furthermore argue that the binder used in Shimada's Example 25 (ally methacrylate/methacrylic acid/N-isopropylamide copolymer) has a strong carboxyl group which is absorbed on the surface of the substrate, and thus applicants argue that Shimada's recording layer cannot be completely removed with printing ink and/or dampening water. However, even if applicants' such argument were correct, present claim language does not require a "complete removal" of the recording layer with printing ink and/or dampening water (also there is no evidence on the record which supports applicants' argument that Shimada's recording layer cannot be completely removed with printing ink or dampening water).

Applicants traverse the 103(a) rejection of claims 10 and 11 over Shimada in view of Crutchfield by arguing that presently claimed encapsulation is to obtain good on-machine development properties, not to prevent chemical reactions. Thus, applicants argue that the cited references lack the requisite motivation to result in the claimed invention. However, when combining references for a 103(a) rejection, one is not required to provide a motivation which is the same as that of present invention. What is required is a motivation to combine, not necessarily the same motivation as that of present inventors.

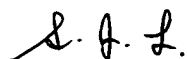
For the reasons stated above, present rejections as addressed above still stand.

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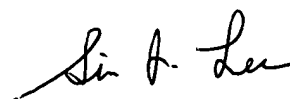
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee
May 12, 2006



SIN LEE
PRIMARY EXAMINER